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April 26, 2002

Richard R. Long, Director Air and Radiation Program U. S. EPA Region 8 999 18<sup>th</sup> Street -- Suite 300 Denver, CO 80220-2466



Dear Mr. Long:

Subject:

Comments on Draft Dispersion Modeling Analysis

This letter is in response to your letter of March 5, 2002, requesting comment on EPA Region 8's draft report "Dispersion Modeling Analysis of PSD Class I Increment Consumption In North Dakota and Eastern Montana." It is our understanding that the comment period has been extended until April 29, 2002.

Otter Tail Power Company is the operating agent for Coyote Station whose co-owners include Montana Dakota Utilities Co., NorthWestern Public Service, Northern Municipal Power Agency, and Otter Tail Power Company. Otter Tail is providing the following comments on behalf of Coyote Station.

As stated on page 39 of the report, EPA regulations require States to periodically review their plans for preventing significant deterioration. If a State determines that an applicable increment is being violated, it is the **State's** responsibility to revise the SIP and correct the violation.

It is appropriate and consistent with the requirements of the Clean Air Act (CAA) that the EPA recognize the variances granted by the U. S. Department of Interior Federal Land Managers to North Dakota sources in assessing consumption of Class I PSD sulfur dioxide increment, and to count emissions from such sources only against the alternative increment established for such sources at the CAA paragraph 165(d)(2)(C)(iv) and not against the increment established under the CAA Section 163(b). Such variances and alternative allowable increments are clearly provided for through the Federal Land Manager Certifications of no adverse impact on the air quality related values (including visibility) in paragraph 165(d)(2)(iii) of the Act. Consequently, it is the Coyote Station co-owner's opinion that EPA's inclusion of sources in their "Draft Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern Montana," that have been granted certification of no adverse impact by the Federal Land Manager is contrary to the very clear provisions of the CAA.

It is interesting to note that in EPA's analysis EPA chose the 90<sup>th</sup> percentile actual emissions for each unit. However, they did not provide any legal justification for their selection of the 90<sup>th</sup> percentile other than the general observation that..."this seems like the most representative method of determining current year emissions, and provides a reasonable estimate of worst case conditions that may recur in the future." The North Dakota Administrative Code chapter 33-15-15 references using

the actual annual average sulfur dioxide emission in tons per year for all major and minor sources for calculating PSD baseline concentrations and PSD increment consumption. The Coyote Station coowners contend that when the method of determining emissions are clearly provided for in the CAA and the ND Administrative Code, EPA is not at liberty to arbitrarily select other emission calculation methodologies as they have done in their analysis.

Finally, the Coyote Station co-owners are concerned with EPA's decision to retroactively apply Class I sulfur dioxide increments to sources in existence at the redesignation of the Class I area in Montana. The Class I redesignated areas are more that 200 km from most of the major sources and the DOH had issued PSD and construction permits to the sources prior to the redesignation to Class I status in 1984.

ENSR conducted an extensive review of EPA's draft report "Dispersion Modeling Analysis of PS Class I increment Consumption of North Dakota." ENSR's findings are included in their report "Review of EPA Region VIII Draft Report: Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern Montana" dated April 2002 (Enclosed). We request that EPA consider ENSR's comments on EPA's and the North Dakota Department of Health's modeling activities and ENSR's report conclusions:

- While the CALPUFF model is an advancement over previous techniques for long-range transport
  modeling, the model still has significant limitations. At the distances being considered between the
  major sources and PSD Class I receptors, CALPUFF would be expected to over predict by about a
  factor of 2, based upon results from independent studies.
- The NDDH CALPUFF evaluation for the year 2000 neglected to consider regional background concentration contributions to the full predicted concentration. When a low regional background value of 4 µg/m3 is accounted for, the evaluation results show an over prediction tendency of about a factor of 2, in agreement with the studies reported by IWAQM.
- Monitoring data in the TRNP North and South Units provides evidence that the SO<sub>2</sub> concentrations have, if anything, dropped over the past 20 years. The modeling should indicate a similar trend. Since it does not, the only explanation is that some PSD increment expanding sources have not yet been accounted for. Possible baseline emission contributors to the past high observed SO<sub>2</sub> concentrations are flares at numerous oil and gas wells and the Royal Oak briquette plant. Since these past sources were much closer to the affected PSD Class I areas than most of the major SO<sub>2</sub> increment consuming sources assessed in this study, these emission reductions could account for the observed improvement in air quality within the PSD Class I areas.

Thank you for the opportunity of providing comments on your draft report.

Sincerely

Terry Graumann

Manager, Environmental Services

Enclosure

C. Francis J. Schwindt – ND DOH